

Journal  
of the  
Royal Society of Western Australia

Vol. 50

Part 4

12.—Additions to the flora of Western Australia: ten miscellaneous  
new species

by A. S. George\*

*Manuscript received 21 February 1967; accepted 21 March 1967.*

**Abstract**

The following new species are described: *Grevillea calcicola* (Proteaceae), *Stachystemon axillaris* (Euphorbiaceae), *Pomaderris bilocularis* (Rhamnaceae), *Guichenotia apetala* (Sterculiaceae), *Darwinia repens* (Myrtaceae), *Xanthosia tomentosa* (Apiaceae), *Styphelia intertexta* (Epacridaceae), *Ipomoea yardiensis* (Convolvulaceae), *Pityrodia canaliculata* and *Pityrodia scabra* (Dieracystylidaceae).

**PROTEACEAE**

*Grevillea calcicola* sp. nov. Sect. *Lissostylis*.

Frutex ad 4m altus, caulis pluribus ramosissimis. Ramuli foliaque juvenes pubescentes, mox glabri. Folia pinnatisecta, 7-20 cm longa, lobis usque ad 7, linearibus, marginibus revolutis. Flores albi in racemis paniculatis terminalibus; rachis pedicellique glabri. Bractee lanceolatae, concavae, paulum hirsutae, 0.75 mm longae, deciduae. Pedicelli 3-4 mm longi. Perianthium 3.5-4 mm longum, angustum, sub limbo revolutum, glabrum praeter pilos paucos in tubo. Stylus glaber 9 mm longus, disco ovato laterale. Ovarium longe stipitatum; torus rectus, glandula hypogyna laterale prominente. Fructus stipitatus, oblongo-ovoideus, compressus. 2.5 cm longus, 1 cm latus. Semina elliptica alis latis annulatis.

*Holotype*: Charles Knife Road, Cape Range, A. S. George 1331, Aug. 30, 1961.

Shrub to 4 m with several much-branched stems. Branchlets and young leaves pubescent, becoming glabrous. Leaves pinnatisect, 7-20 cm long, lobes up to 7, linear, closely revolute. Flowers white in racemes forming a terminal panicle. Rachis and pedicels glabrous. Bracts lanceolate, concave, hirsute on the margins and towards the apex, about 0.75 mm long, deciduous. Pedicels 3-4 mm long. Perianth 3.5-4 mm long, narrow, revolute under the limb, glabrous except for a few scattered hairs inside. Style glabrous, about 9 mm long; stigmatic disc ovate, lateral. Ovary on a long stipe; torus straight, with a prominent, lateral hypogynous gland. Fruit stipitate, oblong-ovoid, compressed, 2.5 cm long, 1 cm broad. Seeds elliptical, with broad, annular wings.

The species is closest to *G. berryana* Ewart et White (which is in the Section *Lissostylis*, not *Cycloptera*, as stated in the original description), differing in the rachis and pedicels being glabrous, the flowers almost so, and in the larger, oblong-ovoid fruit.

It is known only from the Cape Range below North-West Cape, where it always occurs in limestone soil (hence the specific epithet). The holotype is in flower only, but fruiting material has been collected by Y. Chadwick, 1393, 5 miles S. of Yardie Creek homestead.

**EUPHORBIACEAE (PORANTHEROIDEAE)**

*Stachystemon axillaris* sp. nov.

Frutex erectus, tenuis, glaber, ad 70 cm altus. Folia 0.5-3 cm longa, plerumque 1.5-2.5 cm, late-linear, obtusa vel acutiuscula, breviter petiolata; stipulae scariosae, lanceolatae, acutae, decurrentes. Flores virides, axillares, solitarii vel plures, ♂ supra ♀ sed saepe 1 ♀ cum 2 ♂, bracteis paucis parvis scariosis. Flores ♂ pedicellati, ± 1.75 mm diam.; segmenta perianthii herbacea, inaequalia, triangularia vel angustelanceolata, obtusa, incurva; stamina numerosa filamentis brevibus inaequalibus in receptaculo convexo. Flores ♀ breviter pedicellati; segmenta perianthii 2.5-3 mm longa, scariosa, lanceolata, acuta, integra vel irregulariter serrata; ramuli styli 2 raro 3, recurvi. Capsula ovoidea, compressa, 5-6 mm longa (sine styli ramulis persistentibus), abortu monosperma; placenta ab septo secedens. Semen oblique oblongum 4-5 mm longum, carunculatum, hilo impresso.

*Holotype*: 5 miles W of Mogumber Siding, A.S. George 6828, Sept., 17, 1965.

An erect, slender, glabrous shrub to 70 cm. Leaves 0.5-3 cm long, usually 1.5-2.5 cm, broadly linear, obtuse or somewhat acute, shortly petiolate; stipules scarious, lanceolate, acute, decurrent. Flowers green, axillary, solitary or several, the ♂ above the ♀ but often 1 ♀ between 2 ♂, with a few small scarious bracts. Male flowers pedicellate, about 1.75 mm diam.; perianth segments herbaceous, unequal, triangular to narrow-lanceolate, obtuse, incurved; stamens numerous with short unequal filaments on a convex receptacle. Female flowers shortly pedicellate; perianth segments 2.5-3 mm long, scarious, lanceolate, acute, entire or irregularly serrate; style branches 2, rarely 3, recurved. Capsule ovoid, compressed, 5-6 mm long (without the persistent style branches), one-seeded by abortion; placenta separating from the septum. Seed obliquely oblong, 4-5 mm long carunculate, the hilum impressed.

The species differs from the other three of the genus principally in having the flowers axillary, not crowded at or below the apices of the branchlets so as to appear whorled; and in

\* Western Australian Herbarium, Dept. of Agriculture, South Perth.

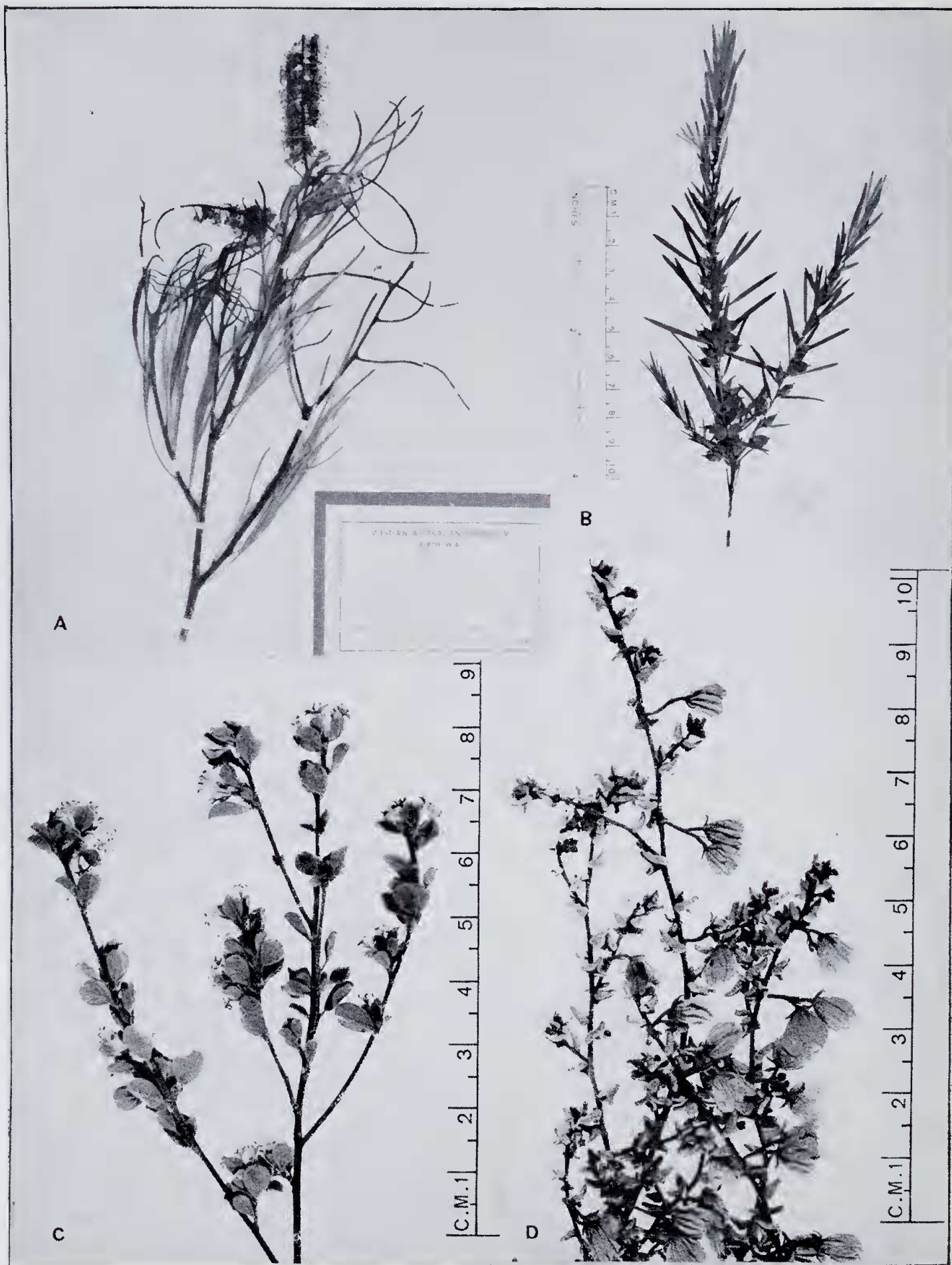


Figure 1.—All photographs from type collections. A. *Grevillea calicola* sp. nov.; B. *Stachystemon axillaris* sp. nov.; C. *Pomaderris biocularis* sp. nov.; D. *Guichenotia apetala* sp. nov.



the short convex receptacle of the male flowers. There are further differences in the floral morphology. It is also known from Wanneroo (J. Havel 177) and 4 miles S. of Cockleshell Gully (George 7814).

#### RHAMNACEAE

##### *Pomaderris bilocularis* sp. nov.

Frutex gracilis ad 50 cm altus, dense tomentosus pilis stellatis simplicibusque. Folia obovata-cordata, truncata, 4-9 mm longa, petiolis 1-1.5 mm longis. Stipuli lanceolati, acuti, brunnei, scariosi,  $\pm$  2 mm longi, extus tomentosi, intus pilis appressis hirsuti. Flores lutei, terminales, corymbosi. Pedicelli 3-4 mm longi. Lobi calycis lanceolati 1.5-2 mm longi, quam tubum multo longiores, extus tomentosi, intus glabri costa media. Petala nulla. Discus nullus. Stamina exserta. Stylus crassus, parum 2-lobatus. Ovarium semi-inferum, ad summum tomentosum, biloculare loculis uniovulatis. Fructus semi-exserta, dehiscentia septicidale. Semina oblonga, laevia, arillata.

*Holotype*: Tuttanning Reserve, East Pingelly, A. S. George 7355, Nov. 16, 1965.

A slender shrub to 50 cm, densely tomentose with stellate and simple hairs. Leaves obovate-cordate, truncate, 4-9 mm long including the petiole of 1-1.5 mm. Stipules lanceolate, acute, brown and scarious,  $\pm$  2 mm long, tomentose outside, hirsute with simple appressed hairs within. Flowers yellow, terminal, corymbose. Pedicels 3-4 mm long. Calyx lobes lanceolate, 1.5-2 mm long, much longer than the tube, tomentose outside, glabrous within with midribs. Petals none. Disc none. Stamens exserted. Style thick, slightly 2-lobed. Ovary half-inferior, densely tomentose on top, 2-celled with one ovule per cell. Fruit semi-exserted, with septicidal dehiscence. Seeds oblong, smooth, arillate.

This species differs from the other petal-less species of the genus in the very shortly lobed style and the 2-celled ovary. The fruit is described from George 7744, also from Tuttanning.

#### STERCULIACEAE

##### *Guichenotia apetala* sp. nov.

Frutex ramosissimus ad 35 cm altus. Rami foliaque juvenes dense stellato-tomentosi. Folia 2-5 mm longa, patentia, subsessilia, triangulare-cordata, ad basin subauriculata, obtusa, marginibus revolutis; tomentosa, supra glabrescentia reticulatovenosa. Stipulae nullae. Flores salmonacei, solitarii vel racemosi; pedunculi quam foliis longiores recurvi, tomentosi. Bractaeae bracteolaeque lineares. Calyx campanulatus 5-7 mm longus, lobis obtusis trinervis, extus stellato-tomentosus, intus tubus glaber, lobis pubescentibus. Petala nulla. Stamina libera antheris 1.5 mm longis. Staminodia nulla. Ovarium 3-loculatum, dense tomentosum, loculis 2-ovulatis; stylus 4 mm longus, gracilis, glaber vel ad basin sparsim stellato-tomentosus. Fructus crustaceus, loculis monospermis. Semina fusca, 2 mm longa, oblonga, laevia, strophiolata.

*Holotype*: Mt. Desmond, SE of Ravensthorpe, T.E.H. Aplin 2693, Oct. 27, 1963.

A much-branched shrub up to 35 cm. Young branches and leaves densely stellate-tomentose. Leaves 2-5 mm long, spreading, subsessile,

triangular-cordate, sub-auriculate, obtuse, the margins revolute; tomentose, becoming glabrous and reticulately-nerved above. Stipules none. Flowers salmon-pink, solitary or shortly racemose; peduncles longer than the leaves, recurved, tomentose. Bracts and bracteoles linear. Calyx campanulate 5-7 mm long, the lobes obtuse, 3-nerved; stellate tomentose outside, glabrous within except for the pubescent lobes. Petals none. Stamens free, anthers 1.5 mm long. Staminodia none. Ovary 3-celled, densely tomentose, with 2 ovules per locule; style 4 mm long, slender, glabrous or sparsely stellate-tomentose at the base. Fruit crustaceous, loculi 1-seeded. Seeds dark brown, smooth, strophiolate, 2 mm long.

This species, lacking stipules and petals, is somewhat anomalous in the genus, but it has the typical ribbed calyx and general habit. It is closest to *G. micrantha* (Steetz) Benth., which occasionally lacks stipules also, differing further in the leaf shape, the glabrous style and the 3-celled ovary. It is known only from the Mt. Desmond area, and has also been collected by K. Newbey (no. 568), F. Humphreys, and A.S. George (1643).

#### MYRTACEAE (CHAMELAUCIEAE)

##### *Darwinia repens* sp. nov.

Frutex glaber ramis prostratis, saepe ad nodos radicanates, etiam ramulis brevibus erectis. Folia opposita, conferta, linearia, teretia-triquetra, 5-10 mm longa, parum scaberula; folia floralia similia. Flores axillares rubri, in pedicellis brevibus crassis. Bracteolae ovatae, scariosae, brunneae, mucronatae, 2.5-3 mm longae. Calycis tubus cylindricus  $\pm$  4 mm longus, lobis orbicularibus breviter ciliatis  $\pm$  1 mm longis. Petala ovali-oblonga 2-3 mm longa. Stamina staminodiaque ad basin breviter connata. Stamina 0.75 mm longa antheris obovatoideis. Stylus gracilis,  $\pm$  15 mm longus; stigma parva, a paucis ciliis subtenta. Ovuli 8.

*Holotype*: 15 miles E. of Mingenew: A. R. Main.

A prostrate, glabrous shrub, often rooting at the nodes, with short erect branchlets. Leaves opposite crowded, linear, terete-triquetrous, 5-10 mm long, slightly scaberulous; floral leaves similar. Flowers axillary, red, on short thick pedicels. Bracteoles ovate, scarious, brown, mucronate, 2.5-3 mm long. Calyx tube cylindrical,  $\pm$  4 mm long, lobes orbicular, shortly ciliate,  $\pm$  1 mm long. Petals oval-obovate, 2-3 mm long. Stamens and staminodes shortly united at the base. Stamens 0.75 mm long, anthers obovoid. Style slender,  $\pm$  15 mm long, stigma small, subtended by a few cilia. Ovules 8.

*Darwinia repens* is in the Section Genetyllis and the third group according to Benthams arrangement, but is quite different from any of the other species.

#### APIACEAE

##### *Xanthosia tomentosa* sp. nov.

Herba perennis ramis pluribus prostratis vel adscendentibus, ad 50 cm longis; stellato-tomentosa, rami demum glabriusculi. Folia in ramis principalibus dispersa, sed in ramulis axillaribus conferta; 10-30 mm longa vel longiora, cuneato-rhomboidea, in petiolos laminibus aequilongos angustata, 3-10-lobata, lobis breviter mucronatis vel acutis, nervis obscuris. Inflo-

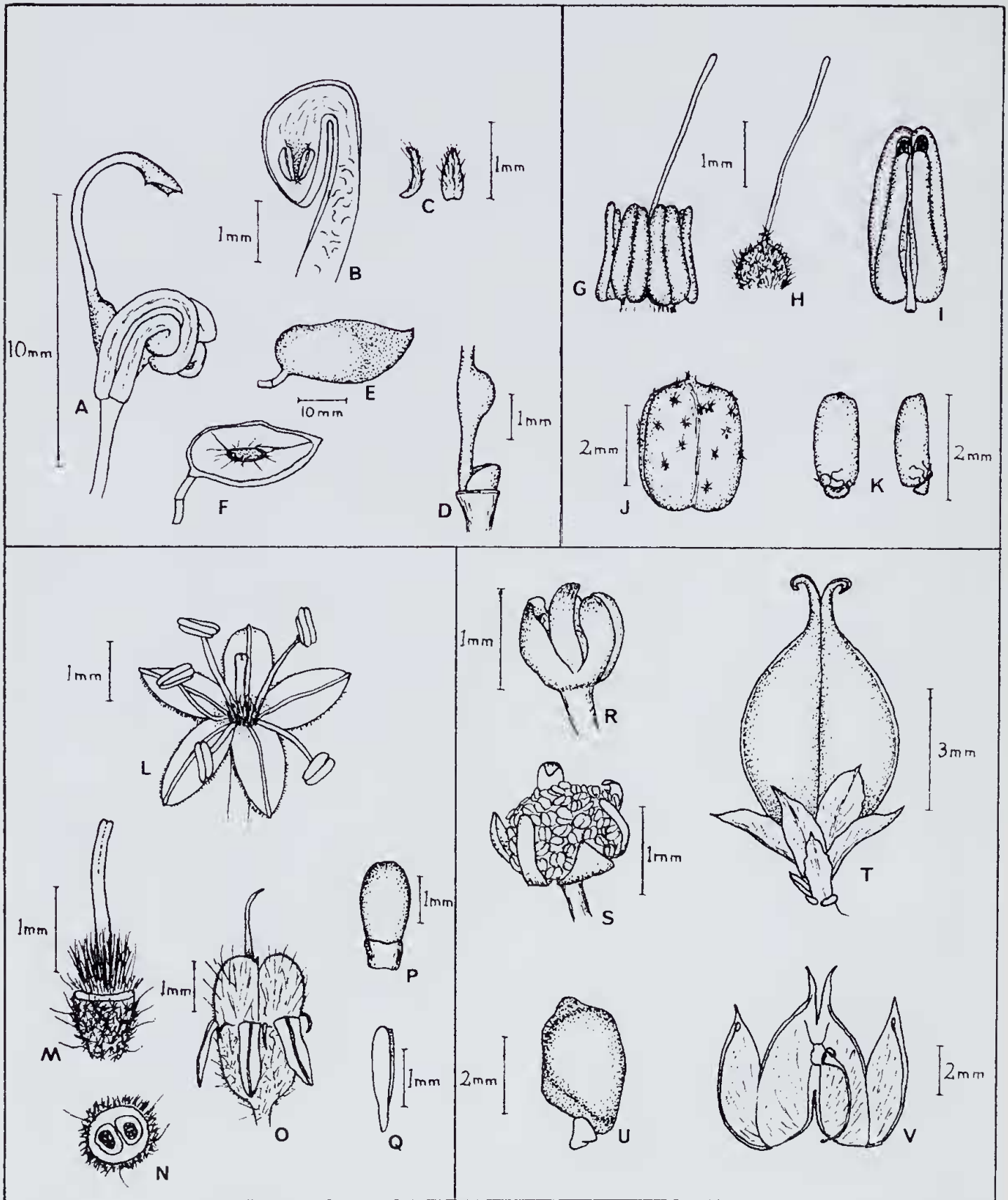


Figure 2.—A-F *Grevillea calcicola*: A. Flower; B. Lower perianth segment, inner view; C. Bracts; D. Ovary and hypogynous gland; E. Fruit; F. Fruit opened, showing seed. A-D from holotype; E, F from Chadwick 1393. G-K *Guichenotia apetala*: G. Stamens surrounding style; H. Ovary and style; I. Anther, inner view; J. Fruit; K. Seeds. G-I from holotype; J, K from Newbey 568. L-Q *Pomaderris bilocularis*: L. Flower; M. Ovary and style; N. T. S. ovary; O. Fruit; P. Seed; Q. Embryo. L-N from George 7355, O-Q from George 7744. R-V *Stachystemon axillaris*: R, S. Male flower; T. Fruit; U. Seed; V. Dehiscent fruit. R, T from George 6828, S. from Havel 177, U, V from George 7814.



rescentia solitaria, terminalia, in pedunculo 3-15 cm longo. Bracteae involucrales 4, 6-9 mm longae, lanceolata-ellipticae, acutae, inderdum lobatae. Bracteae radiatae 4, 15-20 mm longae, ad medium tripartitae, segmentis lateralibus oblique-ovatis, centrale oblanceolata mucronato-acuta. Umbellae 5, floribus ♂ vel ♀. Flores ♀ in pedicellis 0.75-1 mm longis. Calycis tubus 2.5 mm longus; utrumque carpellum latere utroque 3-4-costatum; lobis cordatis, obtusis, < 1 mm longis, glabris. Petali lobos calycis excedentes, inflexi, glabri. Lobi disci prominentes pilis plumosis hirsuti. Styli crassi, ± 1.7 mm longi. Flores ♂ similes sed minores, pedicellis longioribus, carpellis et stylis rudimentalibus.

*Holotype*: 2 miles N. of Cockleshell Gully A.S. George 7827a, Sept. 1, 1966.

Perennial herb with many prostrate or ascending stems to 50 cm long, stellate-tomentose, the stems at length more or less glabrous. Leaves scattered on the main stems, but crowded on axillary branchlets, 10-30 mm long, sometimes longer, cuneate-rhomboid, narrowed into petioles as long as the laminae, 3-10 lobed, the lobes shortly mucronate or acute, the nerves obscure. Inflorescence solitary, terminal, on a peduncle of 3-15 cm. Involucral bracts 4, 6-9 mm long, lanceolate-elliptical, acute, sometimes lobed. Ray bracts 4, 15-20 mm long, divided to the middle into 3 segments, the lateral ones obliquely ovate, the central one oblanceolate, mucronate-acute. Umbels 5, the flowers ♂ or ♀. ♀ flowers on pedicels of 0.75-1 mm. Calyx tube 2.5 mm, each carpel 3-4 ribbed on each side; lobes cordate, obtuse, less than 1 mm long, glabrous. Petals exceeding the calyx lobes, inflexed, glabrous. Disc lobes prominent, hirsute with plumose hairs. Styles thick, ± 1.7 mm long. ♂ flowers similar but smaller, on longer pedicels, with rudimentary carpels and styles.

*X. tomentosa* is close to *X. rotundifolia* D.C., differing chiefly in the decumbent, many-stemmed habit, the leaf shape and the persistent indumentum (the specific epithet referring to the last character). Other collections are from Mt. Peron, C.A. Gardner 8433 and 10265, and 2 miles E of Diamond Springs, K. Newbey 2353.

#### EPACRIDACEAE

##### *Styphelia intertexta* sp. nov.

Frutex ramosissimus ad 1 m altus ramulis breviter tomentosis. Folia patentia, sessilia, 3-9 mm longa anguste-triangularia ad linearia, acuminata, pungentia, marginibus recurvis; supra glabra, subtus pluri-costata breviter tomentosa pilis inter costas intertextis. Flores albi, axillares, gemini, cum flore rudimentale. Bracteae minimae. Bracteolae 1 mm longae, ovatae, obtusae, leviter carinatae, minute ciliatae. Sepala 3-3.5 mm longa, obtusa, minute ciliata. Corolla 7-9 mm longa; lobi quam tubum longiores, revoluti, intus barbarti etiam faux. superna. Stamina multo exserta. Stylus 6-7 mm longus, glaber vel ad basin breviter pubescens. Ovarium glabrum; discus hypogynus lobatus. Drupa ovoidea, abortu monosperma; endocarpium durum; mesocarpium tenue, in sicco caperatum.

*Holotype*: 9 miles N. of Ravensthorpe, A.S. George 4431, May 25, 1963.

A much-branched shrub to 1m, the branchlets shortly tomentose. Leaves spreading, sessile, 3-9 mm long, narrow-triangular to linear, acuminate, pungent, the margins strongly recurved; glabrous above, closely several-ribbed below, tomentose, with the hairs interlocking between the ribs. Flowers white, axillary, in pairs with a rudimentary flower. Bracts very small. Bracteoles 1 mm long, ovate, obtuse, minutely ciliate. Sepals 3-3.5 mm long, obtuse, minutely ciliate. Corolla 7-9 mm long; lobes longer than the tube, revolute, bearded on the inner surface and the upper part of the throat. Stamens much exserted. Style 6-7 mm long, glabrous or shortly pubescent towards the base. Ovary glabrous, hypogynous disc lobed. Drupe ovoid, 1-seeded by abortion; endocarp hard; mesocarp thin, somewhat wrinkled when dried.

Belonging to the Section *Soleniscia*, the species is closest to *S. melaleucoides* F. Muell, from which it chiefly differs in the convex, strongly recurved leaves with tomentose ribs on the lower surface. The specific epithet refers to the interlocking hairs between the ribs.

Other collections are from 10 miles E. of Ongerup, K. Newbey; ± 30 miles W. of Ravensthorpe, A.S. George 7073 (in fruit); Mt. Short, N. of Ravensthorpe, A.S. George 4443; Grass Patch, C.F. Davies 230; Grass Patch, C.J. Rhind 7; N. of Bullabulling, J.S. Beard 3348; and 3 km SE of Queen Victoria Spring, D.W. Goodall 2946.

The collection by Beard has glabrous branchlets and the undersurface of the leaves tomentose only between the ribs. The sepals are 2 mm long, and the corolla tube about 2 mm longer than the sepals. The Goodall collection has less revolute leaves than normal, also tomentose only between the ribs. The flowers are slightly smaller but quite typical morphologically.

#### CONVOLVULACEAE

##### *Ipomoea yardiensis* sp. nov.

Frutex multicaulis ad 1.5 m altus, dense velutinus pilis intricatis. Rami crassi haud volubiles, sine succo lacteo. Folia petiolata late-orbicularia, obtusa vel parum emarginata; petiolus 0.5-3 cm longus, lamina 2-7 cm, penninervis. Flores 1-3 in pedunculis axillares 5-15 m longos. Bracteae obtusae deciduae, 2-3 mm longae. Pedicelli 5-10 mm longi. Sepala ovata, obtusa, subaequalia 8-11 mm longa, ad basin cum 2 glandibus oblongis glabris, extus tomentosa praeter sepalorum interiorum marginibus glabris, intus omnino glabra. Corolla infundibuliformis, 4-7 cm longa, rosea glabra praeter taenias mid-petalinas extus tomentosas. Stamina stylusque inclusus. Filamenta inaequalia, ad basin dilatata, hirsuta; anthera 5-7 mm longa. Stylus glaber; stigmata 2, globosa. Ovarium glabrum biloculatum, loculis bi-ovulatis. Calyx fructifer parum auctus; fructus capsularis, globosus, ad basin 4-valvatus. Semina dense sericeo-villosa, 8 mm longa.

*Holotype*: 3 miles S. of Yardi Creek homestead, on rocky limestone rises at western edge of Cape Range, A.S. George 6617, May 26, 1965.

A many-stemmed shrub to 1.5 m tall, densely tomentose with a close indumentum of intricate woolly hairs. Stems thick, never twining, with-





Figure 3.—All photographs from type collections. A. *Darwinia repens* sp. nov.; B. *Xanthosia tomentosa* sp. nov.; C. *Pityrodia scabra* sp. nov.; D. *Pityrodia canaliculata* sp. nov.; E. *Ipomoea yardiensis* sp. nov.



out milky sap. Leaves petiolate, broadly orbicular, obtuse or slightly emarginate; petioles 0.5-3 cm long, blade 2-7 cm, penninerved. Flowers 1-3 on axillary peduncles 5-15 mm long. Bracts obtuse, deciduous, 2-3 mm long. Pedicels 5-10 mm long. Sepals ovate, obtuse, subequal, 8-11 mm long, with a narrow oblong glabrous gland on each side at the base, tomentose outside, the inner ones with glabrous margins, all glabrous within. Corolla funnel-shaped, 4-7 cm long, bright pink, darker in the tube, glabrous except the mid-petaline bands which are tomentose outside. Stamens and style included. Filaments unequal, dilated and hirsute at the base; anthers 5-7 mm long. Style glabrous, stigmata 2, globular. Ovary glabrous, 2-celled with 2 ovules per cell. Fruiting calyx slightly enlarged. Fruit a globular capsule, the 4 valves splitting to the base. Seeds densely silky-villous, 8 mm long.

So far as can be ascertained in the absence of a full revision of the genus, this species appears to be closest to the American *I. crassicaulis* (Benth.) B.L. Robinson, of the Section *Eriospermum*.

It is known only from, or close to, Yardie Creek Station, south of North West Cape. The fruit is described from a specimen collected near North West Cape by W.H. Butler in Sept. 1963.

#### DICRASTYLIDACEAE

##### *Pityrodia canaliculata* sp. nov. Sect. *Depremesnilia*

Frutex multicaulis ad 2 m altus indumento arcto squamarum peltatarum minute ciliatarum. Folia opposita 1.5-5 cm longa, linearia, obtusa, breviter petiolata, canaliculata-carinata, superne olivacea demum glabra, subtus laevia paulo reticulata, marginibus planis vel leviter recurvibus. Flores axillares pedicellati solitarii vel breviter cymosi. Bracteae minimae. Calyx 3.5-4 mm longus, paulo angulatus; extus squamatus; lobi triangulares 1-1.5 mm longi marginibus incurvis, intus lobis paulo hirsutis tubo glabro. Corolla alba, fauce rufo-maculata, 8-9 mm longa tubo quam calyce longiore, bilabiata; labium superum lobis 2, obtusis, infernum longius 3-lobatum, lobo medio quam aliis majore; corolla extus praeter basin squamata, intus infra medium annulata-barbata, labio inferno pubescente. Stamina paulum exserta; anthera breviter apiculata. Stylus glaber. Ovarium ad apicem hirsutum.

*Holotype*: 19 miles W. of Sandstone, A.S. George 7992, Sept. 12, 1966.

A many-stemmed shrub to 2 m with a close indumentum of peltate, minutely ciliate scales. Leaves opposite, 1.5-5 cm long, linear, obtuse, shortly petiolate, canaliculate-carinate, dark green and becoming glabrous above, pale below and somewhat reticulate, margins flat or very slightly recurved. Flowers axillary, pedicellate solitary or shortly cymose. Bracts very small. Calyx 3.5-4 mm long, somewhat angular, covered with scales outside; lobes deltoid, 1-1.5 mm long, the margins incurved, inside, the lobes slightly hirsute, the tube glabrous. Corolla white with reddish spots in the throat, 8-9 mm long, the tube exceeding the calyx, bilabiate; upper lip of 2 obtuse lobes, lower lip longer, 3-lobed,

the central lobe larger than the others; corolla covered with scales outside except at the base, inside with a dense ring of simple hairs below the middle and pubescent on the lower lip. Stamens slightly exserted; anthers shortly apiculate. Style glabrous. Ovary hirsute on top.

The species is closest to *P. lepidota* (F. Muell) E. Pritzel, differing chiefly as follows: habit much taller; indumentum of less ciliate scales; leaves longer, canaliculate, becoming glabrous above; flowers on longer pedicels; corolla less densely hirsute inside; ovary hirsute only on top; style glabrous.

The specific epithet refers to the leaves.

##### *Pityrodia scabra* sp. nov. Sect. *Chloanthopsis*

Frutex  $\pm$  1 m altus, indumento viscido, aureo pilorum ramosorum. Folia 3-verticillata, 0.5-1.2 cm longa, linearia, obtuse, sessilia, marginibus revolutis  $\pm$  crenulatis ut bullatis videntur; grosse tomentosa supra demum scabra. Flores axillares breviter cymosa. Bracteolae lineares. Calyx 5 mm longus, glanduloso-pubescent, lobis quam tubum paulum brevioribus, involutis costis mediis prominentibus. Corolla 7-8 mm longa, tubo angusto quam lobis longiore; labium superum obtuse-lobatum, infernum longius, 3-lobatum, lobo mediis quam aliis majore; faux ad basin filamentorum etiam secus lobum medium infernum hirsutum; corolla aliter glabra. Stamina breviter exserta; anthera breviter appendiculata. Stylus glaber. Ovarium dense hirsutum, ovulis per funiculos breves affixis; discus hypogynus paulum lobatus.

*Holotype*: Cowcowing, S.B. Rosier 27, Aug. 1959.

Shrub  $\pm$  1 m tall, with a viscid, golden indumentum of branched hairs. Leaves in whorls of 3, 0.5-1.2 cm long, linear, obtuse, sessile, margins revolute,  $\pm$  crenulate so as to appear bullate; coarsely tomentose, becoming scabrous above. Flowers axillary, shortly cymose. Bracteoles linear. Calyx 5 mm long, glandular-pubescent, lobes slightly shorter than the tube, involute with prominent midribs. Corolla 7-8 mm long, the tube narrow, longer than the lobes; upper lip of 2 obtuse lobes, lower lip 3-lobed, the central one larger than the others; throat hirsute around the base of the filaments and along the lower mid-lobe; corolla otherwise glabrous. Stamens shortly exserted; anthers shortly appendiculate. Style glabrous. Ovary densely hirsute, the ovules attached to short funicles; hypogynous disc slightly lobed.

The species appear closest to *P. hemigenioides* (F. Muell.) Benth. However the coarse viscid indumentum gives it an entirely distinct appearance; further differences are the larger whorled leaves with somewhat bullate margins and the flowers in small cymes.

The epithet refers to the rough surface remaining on the leaves as the indumentum wears off.

The holotypes of the ten species described above will be deposited in the Western Australian Herbarium, Perth. Isotypes of all except *Grevillea calcicola* will be distributed to the National Herbarium of Victoria, Melbourne, and the Royal Botanic Gardens, Kew.

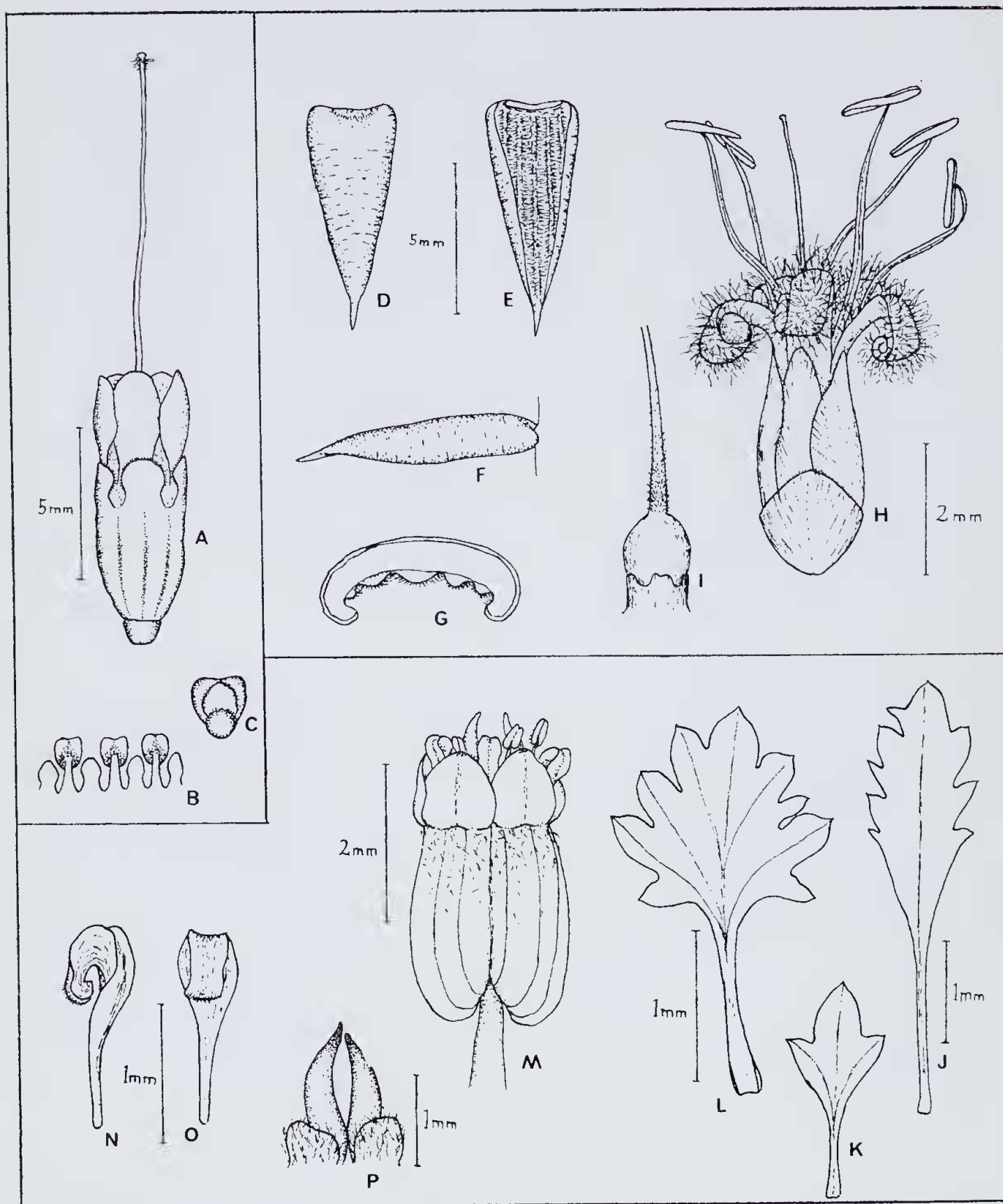


Figure 4.—A-C *Darwinia repens*; A. Flower; B. Three stamens, with staminodia; C. Anther. All from holotype. D-I. *Styphelia intertexta*; D, E, F. Three views of leaf; G. T.S. leaf; H. Flower; I. Ovary, with lower part of style and hypogynous disc. All from holotype. J-P *Xanthosia tomentosa*; J. Leaf from Gardner 8433; K. Small leaf from George 7827b; L. Leaf; M. Flower; N, O. Side and inner view of petal; P. Styles and lobes of disc. L-P from holotype.